DOCUMENT RESUME

ED 288 910 TM 870 717

AUTHOR Smith, Richard M.; Supanich, Gary P.
TITLE The Vocabulary Scores of Company Presidents. Technical Report 1984-1.
INSTITUTION Johnson O'Connor Research Foundation, Chicago, IL. Human Engineering Lab.
PUB DATE Aug 84
NOTE 11p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Administrators; Adults; Aptitude Tests; Definitions; *Presidents; Test Norms; Verbal Tests; Vocabulary Development; *Vocabulary Skills

ABSTRACT

In June 1983, 456 presidents from among 5,000 of the largest companies in the United States took a vocabulary test designed by the Johnson O'Connor Research Foundation, with the purpose of reexaming the contention that a large and exact vocabulary is an attribute characterizing executives. This Executive Vocabulary Test consisted of 50 multiple-choice items, selected to cover a range of vocabulary difficulty from average to hard. Results showed that as a group, the company presidents had a higher average vocabulary score (mean Vocabulary Scale Score (VSS) of 200.1) than that of the norm group of clients tested by the Foundation (mean VSS of 181.3). The evidence from this survey supported the Foundation's earlier contention that an above-average vocabulary is characteristic of company presidents. The small positive correlation between VSS and both age and years of education indicates that these factors only marginally accounted for the variation in vocabulary scores. These data indicated that the scores obtained by the respondents were not always related to the opportunities and advantages provided by higher education or the experience afforded by age. (KSA)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED288910

# THE VOCABULARY SCORES OF COMPANY PRESIDENTS

by
Richard M. Smith, Ph.D.
and Gary P. Supanich

JOHNSON O'CONNOR RESEARCH FOUNDATION

HUMAN ENGINEERING LABORATORY

Technical Report 1984-1

August, 1984

BEST COPY AVAILABLE



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

R. F. Kyle

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TM 870 717

CONTENTS

Page

Abstract . . . . . 1

Introduction . . . . . 1

Sample and Procedure . . . . . 2

Results. . . . . 3

Conclusions. . . . . 5

References . . . . . 7

LIST OF TABLES

Page

1. Comparison of Vocabulary Scale Scores . . . . . 3

2. Comparison of Individuals Scoring Above Various Scale Scores. . . . . 3

3. Quartile Frequencies for Executive Data . . . . . 4

# The Vocabulary Scores of Company Presidents

by Richard M. Smith and Gary P. Supanich

Abstract: Four hundred fifty-six presidents from among 5,000 of the largest companies in the United States took a vocabulary test designed by the Johnson O'Connor Research Foundation. Company presidents as a group obtained higher scores than those of the norm group, which is composed of examinees tested by the Foundation.

## Introduction

For over sixty years, the Johnson O'Connor Research Foundation has been studying the factors that make people successful and satisfied in their work. A special focus of its research has centered on the factors that contribute to executive success. Nearly a half-century ago, Johnson O'Connor drew attention to the association between an extensive vocabulary and executive success (O'Connor, 1935). When 100 college seniors who were studying to become industrial executives were tested, all those who scored in the top 10% on a vocabulary test later became executives, while not a single college senior who scored in the bottom 25% became an executive (O'Connor, 1940). Subsequent research into this question has revealed that executives, and particularly company presidents, tend to possess a large vocabulary (Bowker, 1980).

In conjecturing about the reasons why large vocabularies characterize executives and, possibly, successful people in all fields, Johnson O'Connor concluded: "The final answer seems to be that words are the instruments of thought by which men and women grasp the thoughts of others, and with which they do most of their thinking."

For the most part words can be understood as concepts, or generalizations, which we employ in order to identify and classify objects, mark distinctions and make judgments (Vygotsky, 1962). Through concepts, we bring order to our experience and acquire knowledge of the world. In effect, vocabulary ability reflects knowledge. It seems, then, that a large and exact vocabulary would help executives, since they must assimilate a large quantity of information from a wide array of sources and impart their decisions in clear and accurate language to their subordinates.

## Sample and Procedure

In June 1983, the Johnson O'Connor Research Foundation mailed a specially designed vocabulary test to presidents of the 5,000 largest companies in the United States, with the purpose of reexamining its contention that a large and exact vocabulary is an attribute that characterizes executives. This Executive Vocabulary Test consisted of 50 multiple-choice items, each with five choices. The participants were asked to pick the word or phrase that was closest to the meaning of the word in capital letters (see example below).

JOYFUL sweet bitter hard happy silly

The items on this test were selected to cover a range of vocabulary difficulty from average to hard. The determination of the difficulty of an item was based on research conducted by the Foundation in conjunction with the development of the Vocabulary Scale Score (VSS), a score used with the regular vocabulary test administered to the Foundation's clients, and the Wordbook series, a vocabulary-building program which teaches words systematically in accordance with their level of difficulty.

The Executive Vocabulary Test is an excellent measure of vocabulary knowledge at the upper end of the Vocabulary Scale. Based on the test results of 224 regular clients who took both the Executive Vocabulary Test and the regular vocabulary test, the scores on the Executive Vocabulary Test correlated .89 with those on the regular vocabulary test.

In addition to the 50 vocabulary items, the respondents were asked to provide their age and highest degree earned. They were also asked to respond to three questions concerning the acquisition of vocabulary and its importance to executives.

Of the 464 individuals who returned the self-administered test, 456 were included in the study. Individuals who were clearly identified as not being company presidents or who did not finish the test were excluded. Since this is a self-selected sample, it may not be representative of company presidents in general. Nevertheless, the results are worth examining.

## Results

The mean raw score on this test was 38.1 out of 50 items and the median raw score was 39.4. The raw scores on the test ranged from 13 to 50, with 23% of the sample scoring 45 or above. Eleven of the 456 respondents answered all of the items correctly. In terms of the Vocabulary Scale Score used by the Foundation, the mean score of the respondents was 200.1 and the median score was 202.4. Based on the norms developed by the Foundation for its clients, the mean Vocabulary Scale Score for males and females 33 years of age or older was 181.3 and the median score was 187. [It should be noted that the average number of years of education of Foundation clients is 16 years for males and 15.7 years for females (Bowker, 1981). Both averages are based on clients 25 years of age or older.] When compared with this norm group, 50% of the executives scored at or above the 75th percentile.

Table 1
Comparison of Vocabulary Scale Scores

| | | Vocabulary Scale Score | | |
|---|---|---|---|---|
| | N | Mean | S.D. | Median |
| Norming Sample (age 33+) | 863 | 181.3 | 29 | 187 |
| Executive Study | 456 | 200.1 | 16 | 202 |

Table 2 provides a comparison between the percentage of company presidents and that of Foundation clients who scored above a particular Vocabulary Scale Score.

Table 2
Comparison of Percentage of Individuals Scoring Above Various Vocabulary Scale Scores

| VSS | Presidents | Norm Group |
|---|---|---|
| 180 | 90% | 60% |
| 187 | 84% | 50% |
| 193 | 70% | 40% |
| 200 | 57% | 30% |
| 206 | 39% | 20% |
| 214 | 18% | 10% |
| 217 | 11% | 5% |

Table 3 provides a breakdown of the vocabulary scores in each quartile for the individuals included in this study.

Table 3
Quartile Frequencies for Executive Data

| | Quartile | | | |
|---|---|---|---|---|
| | D | C | B | A |
| VSS Range | 164 & below | 165-186 | 187-202 | 203 & above |
| Executive Study | 5% | 11% | 34% | 50% |

The correlation between the Vocabulary Scale Score and the age of the respondents was .21. The correlation between the Vocabulary Scale Score and their number of years of education was .27. Both of these correlations are significant at the .001 level. Even though these correlations are statistically significant, this is more a factor of the number of executives in the study than the strength of the correlation, since age and number of years of education individually account for less than 8% of the variation in the Vocabulary Scale Score.

Three hundred seventy-nine respondents listed their age. Ages ranged from 25 to 80. The median age was 56. A total of 369 respondents provided information about the highest degree that each had earned: 2 had a grade school education, 2 others did not obtain a high school diploma, 16 completed high school, 17 attended college for varying lengths of time without receiving a degree, 173 had undergraduate college degrees, and 159 completed graduate work of one form or another.

In addition, the results of the three questions regarding methods of acquisition and the importance of a large vocabulary to executives are as follows:

1) Do you think that vocabulary building would be a useful activity for someone seeking to advance in the business world?

| | | |
|---|---|---|
| extremely useful | 247 | 55.6% |
| moderately useful | 184 | 41.4% |
| not very useful | 12 | 2.8% |
| not at all useful | 1 | .2% |

2) How would you rate the importance of vocabulary knowledge in executive positions in the business world?

| | | |
|---|---|---|
| extremely important | 222 | 50.0% |
| moderately important | 214 | 48.2% |
| not very important | 8 | 1.8% |
| not at all important | 0 | --- |

3) Since leaving school, have you ever made an effort to increase your vocabulary? (If yes, please explain when and how you went about it.)

| | | |
|---|---|---|
| yes | 232 | 54.5% |
| no | 194 | 46.5% |

| | | |
|---|---|---|
| How: | General reading | 59 |
| | Dictionary | 32 |
| | Vocabulary books | 7 |
| | Crossword puzzles | 5 |
| | Listening | 3 |
| | Reader's Digest | 1 |
| | Foreign language | 1 |
| | Public speaking | 1 |
| | Technical reading | 1 |
| | Combination of two or more of above | 87 |

Since a large number of those responding to the last question gave two or more ways for increasing their vocabulary, it might be more informative to look at how many responses were given for a particular method, either by itself or with some other method. Here is that breakdown:

| | |
|---|---|
| Reading + another method | 129 |
| Dictionary + another method | 82 |
| Crossword puzzles + another method | 16 |
| Vocabulary books + another method | 14 |
| Listening + another method | 8 |
| Reader's Digest + another method | 5 |
| Foreign language + another method | 3 |
| Combination of three of the above | 19 |

## Conclusions

As a group, the company presidents who participated in this study had a higher average vocabulary score (mean = VSS 200.1) than that of the norm group of clients tested by the Foundation (mean = VSS 181.3). As noted earlier, Foundation clients have an average of approximately 16 years of education. Half of the

company presidents scored at or above the 75th percentile for the norm group. Only 12% of the respondents scored below the mean for the norm group. The evidence from this survey, therefore, supports the Foundation's earlier contention that an above-average vocabulary is a characteristic of company presidents.

The small positive correlation between Vocabulary Scale Scores and both age and years of education indicates that age and years of education only marginally account for the variation in vocabulary scores. These data indicate that the scores obtained by the respondents are not always related to the opportunities and advantages provided by higher education and the experiences afforded by age.

In reply to the question about vocabulary acquisition, 97% of the respondents regarded vocabulary building as a useful activity. However, slightly under 55% of them made an effort to improve their own vocabulary after finishing school. Those who responded affirmatively to the latter question relied for the most part upon general reading and dictionaries, eschewing a systematic approach to vocabulary improvement.

At this point it would be worthwhile to broaden this study by collecting data on the vocabulary knowledge of other administrative levels of the largest companies in the United States. An expanded study would enable us to compare vocabulary levels of different corporate positions and test the hypothesis that positions arrange themselves in a hierarchy or rank order of vocabulary ability.

## References

The technical report and the statistical bulletins mentioned in the reference list are published by the Johnson O'Connor Research Foundation, New York. Technical reports are available for sale to the general public, but some statistical bulletins contain confidential information which prohibits their distribution to the public.

Bowker, Richard. (1980). Validity of English Vocabulary Tests. (Statistical Bulletin, 1980-24).

Bowker, Richard. (1981). Demographic Information Concerning Foundation Examinees. (Statistical Bulletin, 1981-37).

O'Connor, Johnson. (1935). The English Vocabulary Scores of 75 Executives. (Technical Report-2).

O'Connor, Johnson. (1940). Unsolved Business Problems. New York: Human Engineering Laboratory, Incorporated.

Vygotsky, L.S. (1962). Thought and Language. (Eugenia Hanfmann and Gertrude Vakar, Ed. and Trans.). Cambridge, Massachusetts: The M.I.T. Press. (Original work published 1934).

JOHNSON O'CONNOR RESEARCH FOUNDATION
HUMAN ENGINEERING LABORATORY